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IDAHO TRANSPORTATION DEPARTMENT

2004

HIGHWAY REPORT

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"We provide high quality, cost-effective transportation systems that are safe, reliable and responsive for the economical and efficient movement of people and products."

ITD Mission Statement

Pavement Condition

Measure: Deficient Pavement

% Deficient Pavement

1994 Benchmark:	37%
FY 2004 Actual	19%
FY 2005 Target:	18-15%

Background Information

Pavement conditions on the State Highway System are categorized as either good, fair, poor, or very poor. Deficient pavement is categorized as either poor or very poor. The primary indicators of pavement condition are roughness, cracking, and rutting.

Roughness and rutting are indicators of a roadway's ability to meet the expectations of motorists and are measured on the entire State Highway System each year by a profilometer. This equipment provides information used to determine pavement roughness based on a scale of 0.0 to 5.0 (0.0 being the roughest and 5.0 being the smoothest). Rutting severity on a roadway's surface is measured by average rut depth.

Pavement distress (cracking) is another important indicator of pavement condition and can quickly lead to further deterioration of road surfaces. Pavement distress inspections record the type, extent, and severity of cracking. Cracking, like roughness, is measured on a scale of 0.0 to 5.0 (0.0 being the worst and 5.0 being the best). Pavement distress ratings are performed annually on the entire State Highway System.

Preventive maintenance, rehabilitation, and reconstruction projects are some of the tools the department uses to either extend or renew the life of roadways. Selecting the appropriate tool at the most opportune time allows the department to efficiently spend limited roadway dollars.

Strategic Outlook

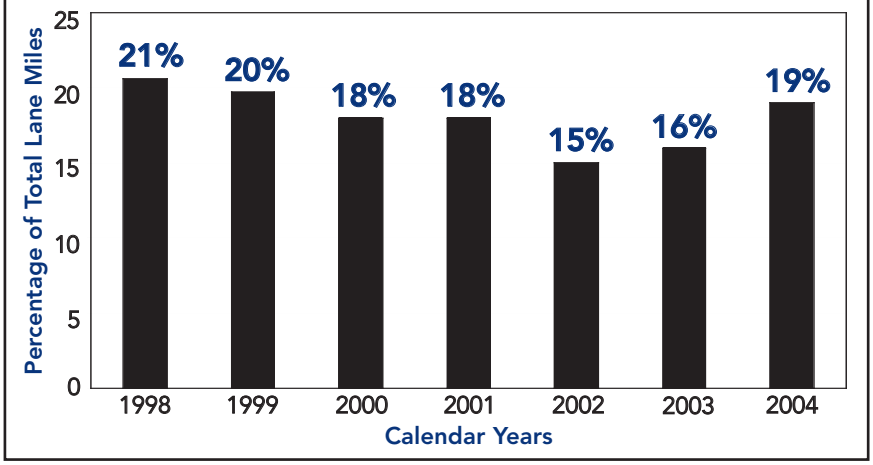
For calendar year 2004, the following miles of pavement-related projects were completed on the State Highway System:

- 338 lane miles of pavement rehabilitation
- 96 lane miles of reconstruction
- 434 total

The Deficient Pavement Chart (see page 3) illustrates the reduction in pavement deficiencies on the State Highway System over the last seven years.

The Idaho Transportation Board has committed at least $31 million annually to pavement rehabilitation, which has played a major role in the reduction of deficient pavement. The amount of pavement rated as deficient increased in 2004, and this will be addressed during the next programming cycle. Our commitment to maintain deficient pavements at 15 percent or less will continue to drive our program and our asset management decisions.

Deficient Pavement Chart



Actual Pavement Deficiencies (State Highway System), 1998 - 2004

Deficient Pavement Lane Miles by District*

District	Total Lane Miles	Total Deficient Lane Miles	% Deficient
District 1	1,445	172	12
District 2	1,433	253	18
District 3	2,529	522	21
District 4	2,332	484	21
District 5	1,821	270	15
District 6	2,293	545	24
TOTAL	**11,853**	**2,246**	**19****

* Preliminary data

** Weighted average

Bridge Condition

2004 Measures

- Weight restricted 9
  – FY2008 Target 7
- Height restricted 7
  – FY2008 Target 2
- Width restricted 44
  – FY2008 Target 17

Measure: Restricted Bridges

Background Information

There are 1,752 bridges on the State Highway System. Half were built prior to 1964, and four percent are restricted due to weight limits (weight restricted), curb to curb width restrictions (width restricted), or trusses with vertical clearances under 16 feet (height restricted).

Bridge restrictions negatively impact the State Highway System's ability to meet the needs of transportation users. Weight-restricted bridges impede commercial traffic, height-restricted bridges impact oversize truck routing, and width-restricted bridges contribute to traffic congestion and safety hazards.

As bridges age, they can become deficient due to structural deterioration, width and height restrictions, increased traffic volume, and reduced load carrying ability. Each bridge is inspected at least every two years for structural integrity and safety. The results of this inspection are part of the calculation of the bridge's "federal sufficiency rating." This rating quantifies the condition of a bridge and its ability to meet current needs. Sufficiency ratings range from 0 to 100, with 100 representing a "perfect" bridge. Bridges with sufficiency ratings below 50 that are classified structurally deficient or functionally obsolete are eligible for federal replacement funds.

Strategic Outlook

The following bridge-related targeted performance standards have been established:

- Reduce the number of weight-restricted bridges from nine to seven by the year 2008.
- Reduce the number of height-restricted bridges (truss bridges with less than 16 feet of vertical clearance) from seven to two by the year 2008.
- Reduce the number of width-restricted bridges from 44 to 17 by the year 2008.

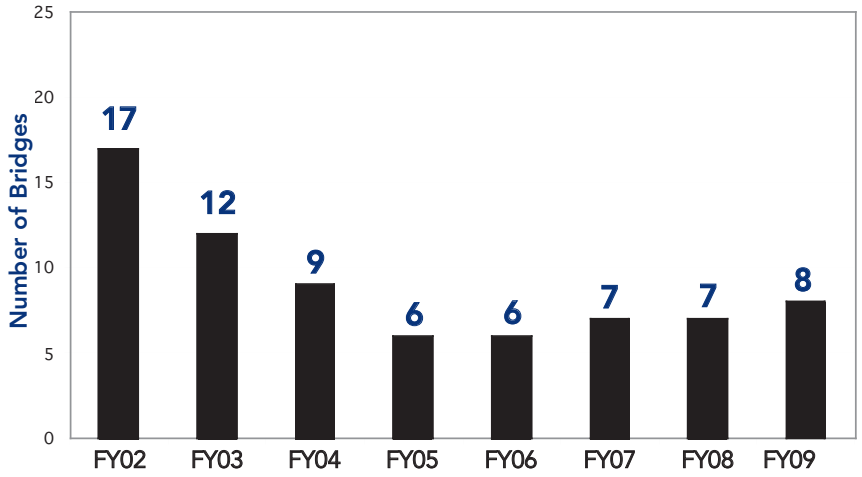
Bridge repair and replacement projects have been scheduled across the state through 2009 to meet these performance standards.

The Bridge Section has traveled to neighboring states to evaluate and share information on deck preservations strategies. ITD continues to implement and use modules of PONTIS™, the bridge management system developed by American Association of State Highway and Transportation Officials (AASHTO).

The University of Idaho is using a research project to develop a finite element model of the Perrine Bridge that will allow ITD to analyze the bridge for over-legal permit loads.

ITD continues to apply a balanced strategy of bridge management, emphasizing preservation, rehabilitation, and replacement to maximize resources. As part of this strategy, each district receives quarterly reports detailing maintenance needs. The districts in turn report accomplished work, which is then entered into the bridge management system. This represents a significant improvement in tracking maintenance work on our bridges.

Weight Restricted Bridges Impending Commercial Traffic



Actual and Targeted Performance Levels, FY02 to FY09

State Highway System Bridges*

District	Total Bridges	Weight Restricted	Height Restricted	Width Restricted
District 1	257	7	5	18
District 2	166	0	0	5
District 3	392	0	1	6
District 4	285	0	0	6
District 5	314	0	0	1
District 6	338	2	1	8
TOTAL	**1,752**	**9**	**7**	**44**

* As of July 2004

Highway Congestion

2004 Measures

Rural Lane Miles Congested:	83
Urban Miles Congested:	74
% of Urban Miles Uncongested:	87

Measure: Congested Highway Miles

■ Background Information

Highway congestion is caused by more vehicles using a roadway than the roadway can efficiently carry. The travel-related frustration that drivers experience in urban areas is often caused by extended travel times due to the number of vehicles on the roadway during peak commuting hours.

A number of other factors also can contribute to congestion on urban and rural roadways, including:

- low vehicle occupancies
- a high percentage of large vehicles (commercial trucks, buses, recreational vehicles, etc.)
- narrow lanes and inadequate shoulders
- signals and stop signs
- inadequate turn bays
- lack of passing lanes
- too many access points (driveways and intersections)
- incidents impeding traffic flow

Signs and directional arrows reduce collisions and driver frustration at busy intersections.

Urban Congestion

In 2002, the department established a new method of identifying and monitoring congested urban roadways, based upon travel times. The new method focuses on comparing "low volume" to "high volume" travel times for a section of road. Average travel times from point to point are measured when traffic volumes are at their highest and lowest. ITD then uses the high and low volume travel times to create an urban travel delay index. This year the threshold designating congestion was reduced to more accurately correspond with customer perception. The target is to keep the travel delay index rate of 1.5 or less on 82 percent of measured urban lane miles.

Rural Congestion

Passing lane deficiencies are the primary cause of rural congestion. These deficiencies are determined by a roadway's traffic volume, percent of commercial vehicle traffic and terrain. Drivers who experience a lack of passing opportunity may be tempted to pass in dangerous locations. Therefore, all passing lane additions also improve highway safety.

■ Strategic Outlook

Urban Areas

ITD will continue to focus on improving signal coordination, adding turn lanes, supporting ride sharing programs, managing incidents, controlling access and implementing intelligent transportation technology.

Rural Areas

ITD will continue to alleviate rural congestion by adding passing lanes and turnout bays for slow-moving vehicles, and by implementing intelligent transportation technology.

Highway Miles*

District	Rural Lane Miles	Congested Rural Lane Miles*	Congested Urban Miles
District 1	1,259	20	11.9
District 2	1,388	0	1.0
District 3	2,028	51	32.2
District 4	2,154	12	13.8
District 5	1,589	0	10.8
District 6	2,173	0	4.7
TOTAL	**10,591**	**83**	**74.4**

*Miles are rounded.

**Miles measured directionally.

High-performance, multi-lane highways provide travelers and motor carriers with safer, more efficient routes to their destinations.

Highway Safety – Driver Behavior

2003 Measures

- 5 Yr. Serious Injury Rate 12.00
- 5 Yr. Fatality Rate 1.93
- Seat Belt Usage 71.7%

2006 Targeted Performance

- 5 Yr. Serious Injury Rate 10.22
- 5 Yr. Fatality Rate 1.80
- Seat Belt Usage 76%

Measure: Serious Injury, Fatality and Seat Belt Usage Rates

Background Information

Between 1991 and 2003, the annual vehicle miles of travel (AVMT), population and number of registered vehicles steadily increased in Idaho, while fatalities and serious injuries remained fairly constant.

Idaho's primary highway safety goal is to "reduce the number of deaths and serious injuries resulting from motor vehicle collisions." Targeted performance standards for the year 2006 seek to reduce the five-year rates to 10.22 serious injuries per 100 million AVMT, 1.80 fatalities per 100 million AVMT, and increase seat belt usage to 76 percent.

ITD's highway safety successes are due to an effective combination of programs and approaches—involving both driver behavior and highway conditions. Without a proactive highway safety program, Idaho's injury and fatality rates might have increased because of growth in AVMT, population, and the number of registered vehicles.

Driver Behavior

In 2003, 293 people were killed on Idaho roads (239 were vehicle occupants, 63 percent were not wearing seat belts). Another 1,607 people were seriously injured. ITD's Office of Traffic and Highway Safety, through federal grant programs, seeks to influence driver behavior by funding statewide and community programs designed to improve identified negative driver behaviors. In 2003, Idaho seat belt observational surveys found that only 72 percent of front seat occupants wore seat belts. National usage was 79 percent. Aggressive driving was a contributing factor in 55 percent of Idaho collisions, and more than 23 percent of traffic fatalities and serious injuries involved impaired drivers.

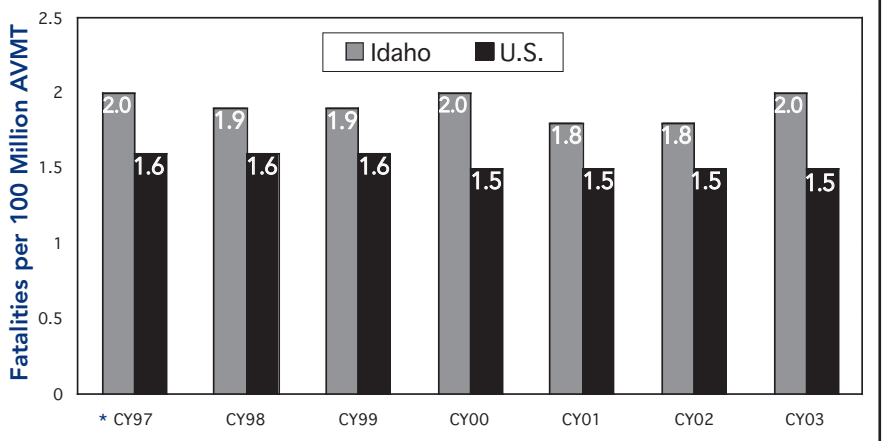
Strategic Outlook

Highway safety grants are used for local programs and statewide efforts designed to change driver behavior that leads to traffic deaths and injuries. The primarily focus is on safety restraint use, impaired driving, aggressive driving, youthful drivers, child safety and bicycle/pedestrian issues.

The department met its goal of increasing the rate of Idaho's seat belt usage in 2003, following implementation of a stronger seat belt law. The law raised the fine from $5 to $10, and includes all seating positions. It still requires law enforcement officers to observe a primary violation before they can enforce a seat belt violation. The department continues to share the message that seat belt usage is now required by law.

The "Click It, Don't Risk It" campaign and department-funded media and enforcement activities contributed to Idaho's largest annual increase in the seat belt usage rate, increasing from 62.9 to 71.7 in one year.

Idaho and U.S. Fatality Rates (Rounded)



*Calendar year

1999 - 2003 Idaho Rates*

Category	Annual Rate					Current 5 yr. Rate
	1999	2000	2001	2002	2003	
Fatality Rate	1.94	2.01	1.81	1.85	2.03	1.93
Serious Injury Rate	12.73	12.62	11.29	12.24	11.16	12.00
Seat Belt Usage Rate	57.9	58.6	60.4	62.9	71.70	62.30

* Rates per 100 million VMT

**Reflects most recent accident reports received from law enforcement agencies.